



MAINE DEPARTMENT OF  
**Energy Resources**

# **Maine Clean Energy Industry Report**

Thursday, April 9, 2026

Report Prepared by **[bw]** RESEARCH  
PARTNERSHIP

# Agenda

- Welcome and Introductions
- Overview of Maine DOER and report background
- Clean Energy Industry Report overview
- Q&A



# Maine Department of Energy Resources (DOER)

DOER is Maine's designated state energy office tasked with activities relating to state energy policies, planning, and development.

[maine.gov/energy](https://maine.gov/energy)

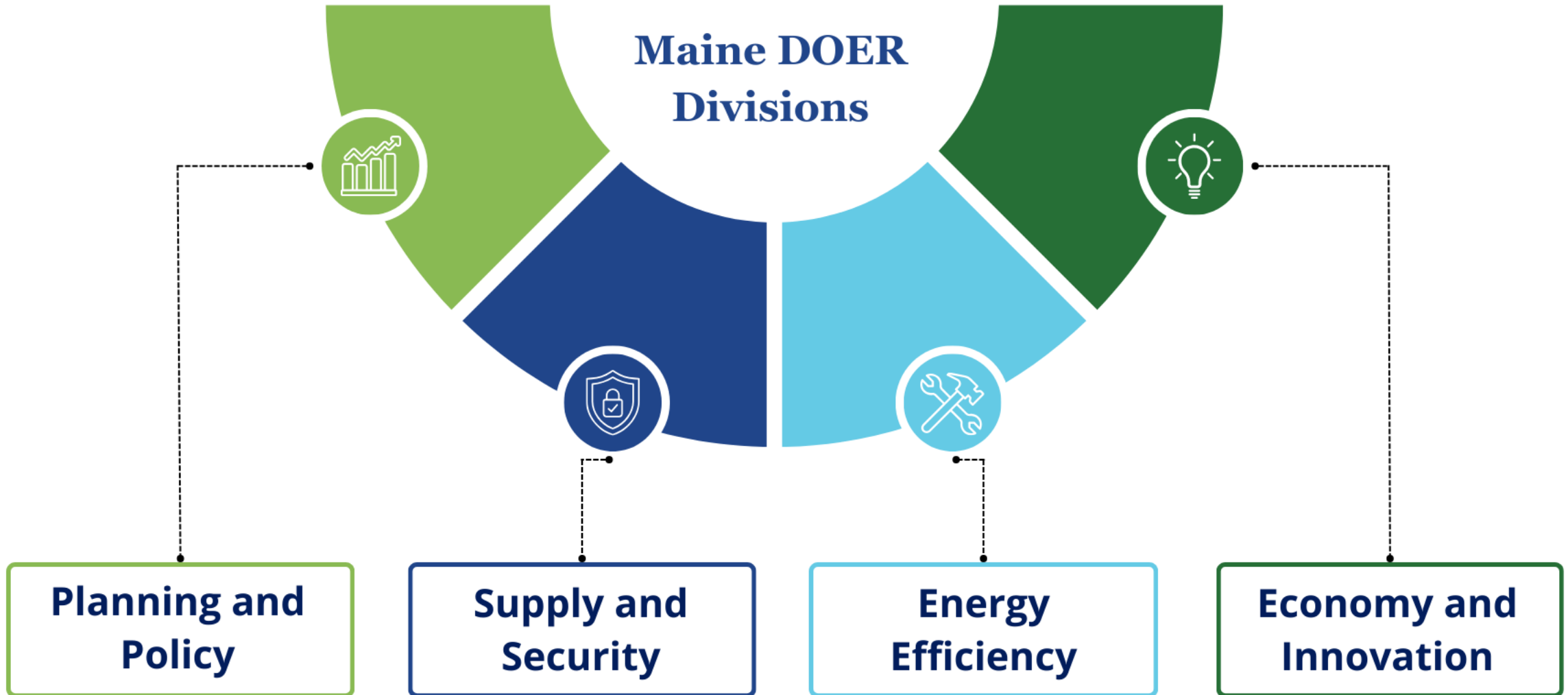


MAINE DEPARTMENT OF  
Energy Resources



# MAINE DEPARTMENT OF Energy Resources

Working to ensure affordable, reliable, cleaner energy for Maine people and businesses



# About the CEIR

- Maine Clean Energy Industry Report (CEIR)
- Published annually by DOER since 2022
- Federal data (from 2024), collected and analyzed by BW Research
- Significant growth in clean energy has driven job creation across the state:
  - More than **2 GW** renewable energy installed/upgraded since 2018
  - **200K** heat pumps installed and counting
  - More than **21K** buildings weatherized
  - And more...



MAINE DEPARTMENT OF  
Energy Resources

## Maine Clean Energy Industry Report

Prepared for Maine Department of Energy Resources

March 2026

# Key Findings

1. **More than 16,000** people employed in clean energy in Maine
2. Contributes **\$3 billion annually** to Maine's economy
3. Growing faster than other New England states (2020-2024)
4. Outpacing Maine's overall economy at **4% annually**
5. Energy efficiency and construction are the **biggest drivers of clean energy employment** in Maine
6. **Nearly 60%** are working in energy efficiency jobs (**9,500 people**)





20  
25

MAINE  
CLEAN ENERGY  
INDUSTRY REPORT

[bw] RESEARCH  
PARTNERSHIP

# Contents

- About BW Research
- Methodology
- Overview of Maine's Energy Industry
- Overview of Clean Energy Trends
- Overview of Traditional Energy Trends
- Detailed Clean Energy Trends
  - GSP
  - Establishments
  - Value Chains
  - Technology Sectors
  - Counties
  - Demographics
- Occupational Analysis

# BW Research Partnership Project Team



**Phil Jordan**  
CEO & Principal  
Researcher



**Sophia Nelson**  
Associate Project  
Manager



**Sophia Chryssanthacopoulos**  
Associate Research  
Manager



**Henry Li**  
Research  
Analyst

# Methodology

- The 4<sup>th</sup> annual Clean Energy Industry Report
- First time traditional energy employment is included in the report
- Data for the 2025 Maine Clean Energy Industry Report is sourced from the 2025 US Energy and Employment Report (USEER), covering the 2024 data year

5.29%

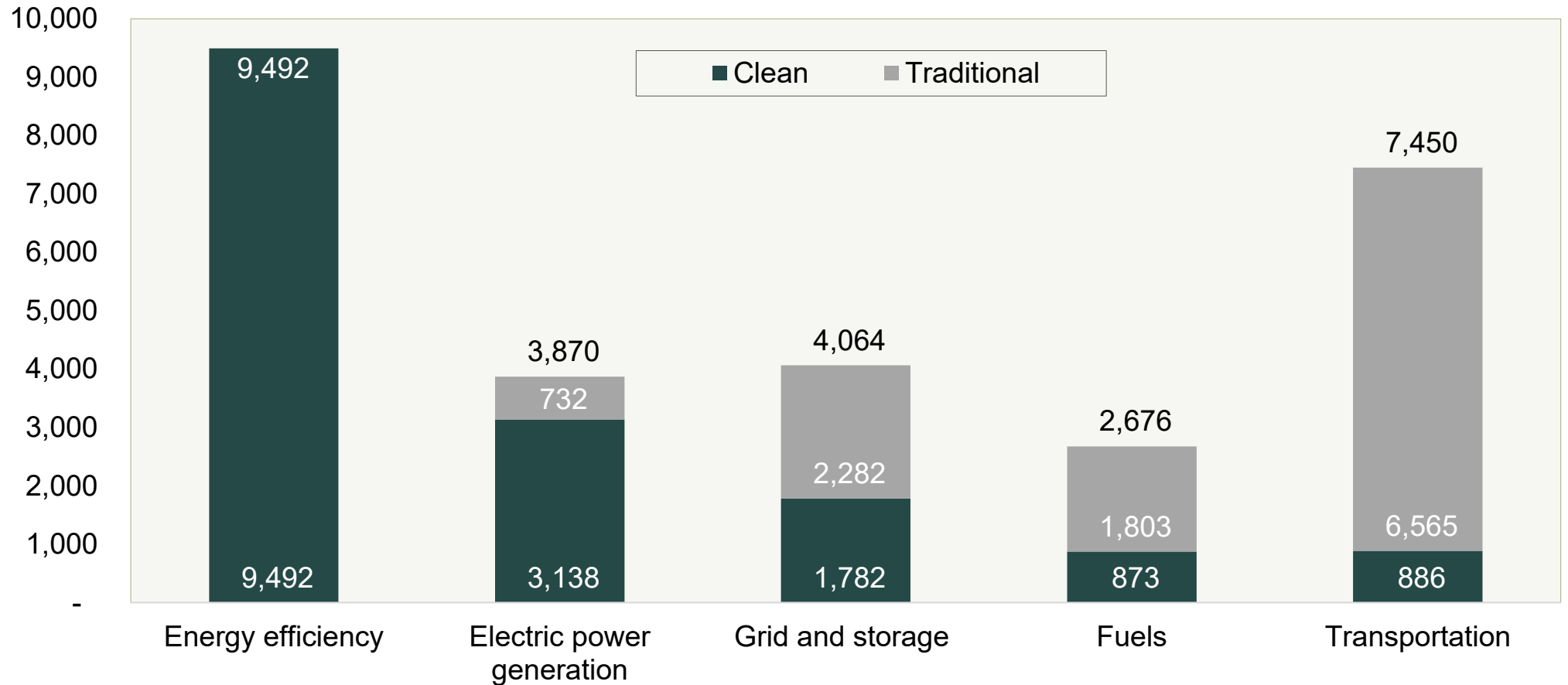
margin of error  
at a 95% confidence level

388

business establishments  
participated in the survey

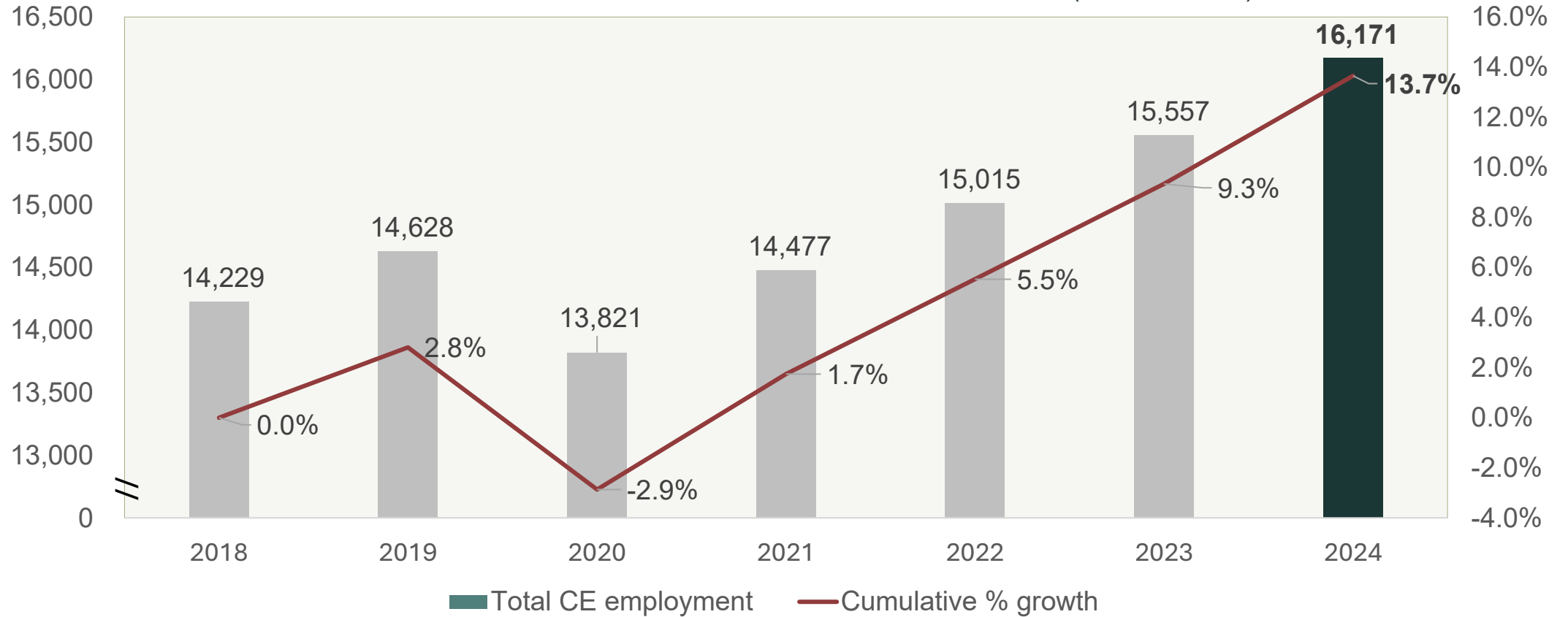
# Maine’s energy industry consisted of 27,500 workers in 2024, accounting for 4.2 percent of total state employment.

FIG. 1. ENERGY EMPLOYMENT IN MAINE, BY TECHNOLOGY SECTOR, 2024 (REPORT P. 8)



# Maine’s clean energy industry grew by nearly 4 percent year-over-year in 2024, three times as fast as Maine’s total economy.

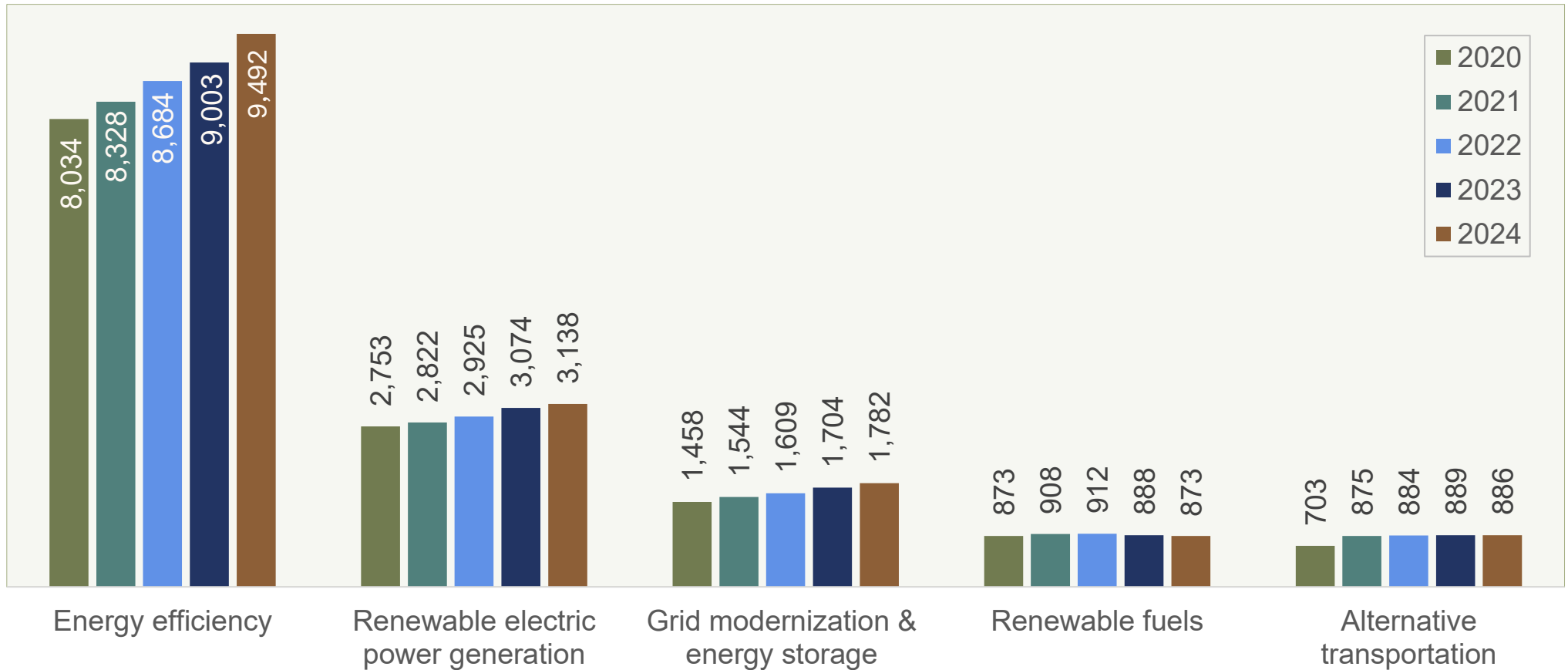
FIG. 2. CLEAN ENERGY EMPLOYMENT IN MAINE, 2018-2024 (REPORT P. 9)



Quarterly and Annual Industry Employment and Wages. Center for Workforce Research and Information. Maine Department of Labor

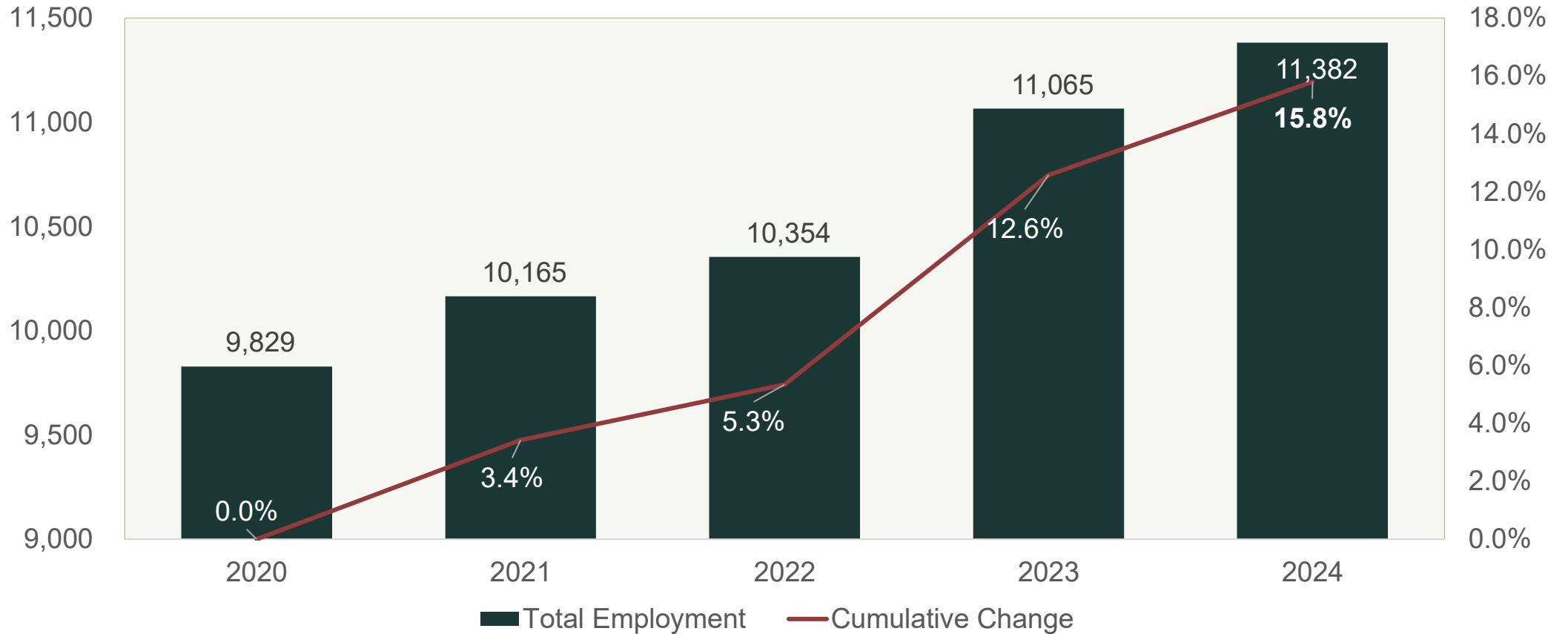
# Energy efficiency added almost 500 jobs (+5.4 percent) in 2024 and accounted for 59 percent of Maine’s clean energy workforce.

FIG. 3. CLEAN ENERGY EMPLOYMENT IN MAINE BY TECHNOLOGY SECTOR, 2020-2024 (REPORT P. 11)



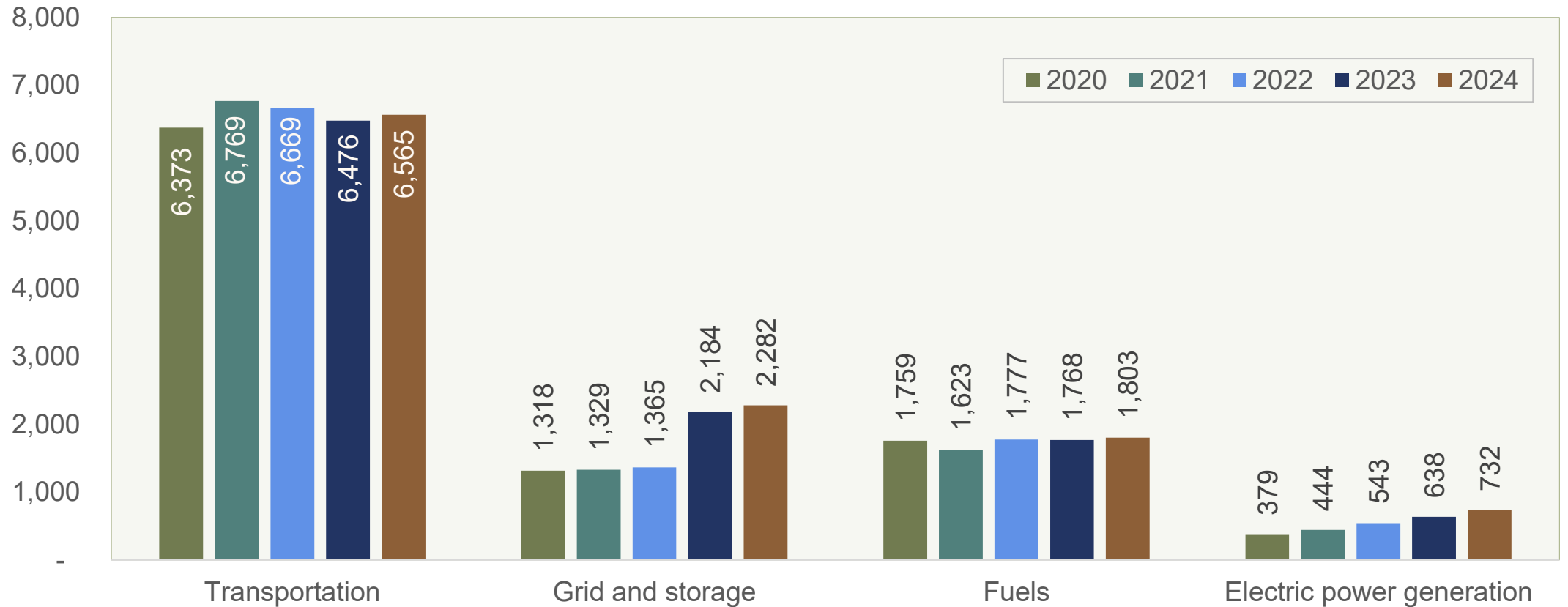
# Maine’s traditional energy workforce has steadily grown since 2020, but it has grown more slowly than the clean energy workforce.

FIG. 4. TRADITIONAL ENERGY EMPLOYMENT IN MAINE, 2020-2024 (REPORT P. 13)



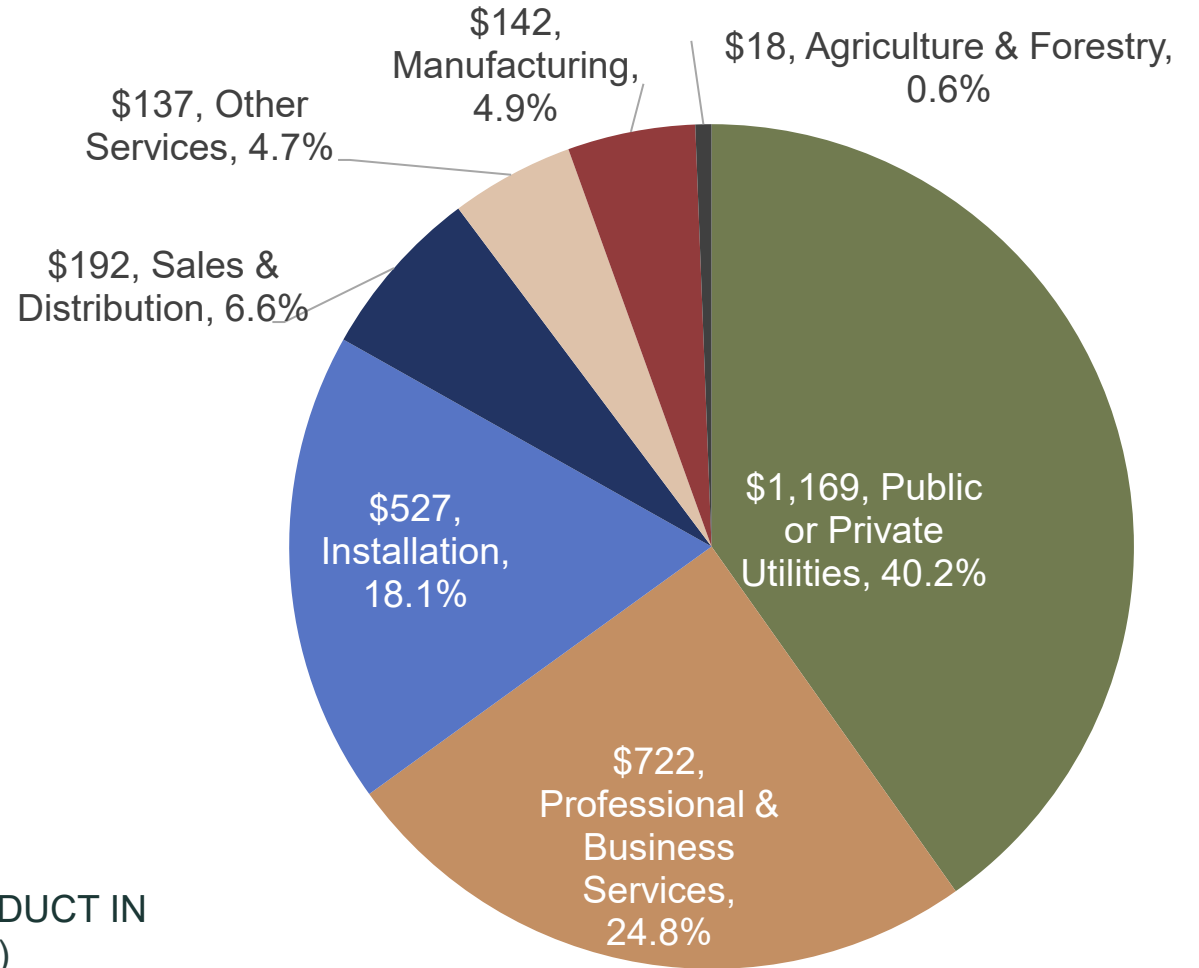
# Recent job growth in traditional energy is driven primarily by transmission and distribution jobs in grid and storage.

FIG. 5. TRADITIONAL ENERGY EMPLOYMENT IN MAINE BY TECHNOLOGY SECTOR, 2020-2024 (REPORT P. 14)



# Maine's Clean Energy Industry: Detailed Analysis

**Maine’s clean energy industry contributed \$2.9B (2.9 percent) to total state product, led by the utilities sector.**

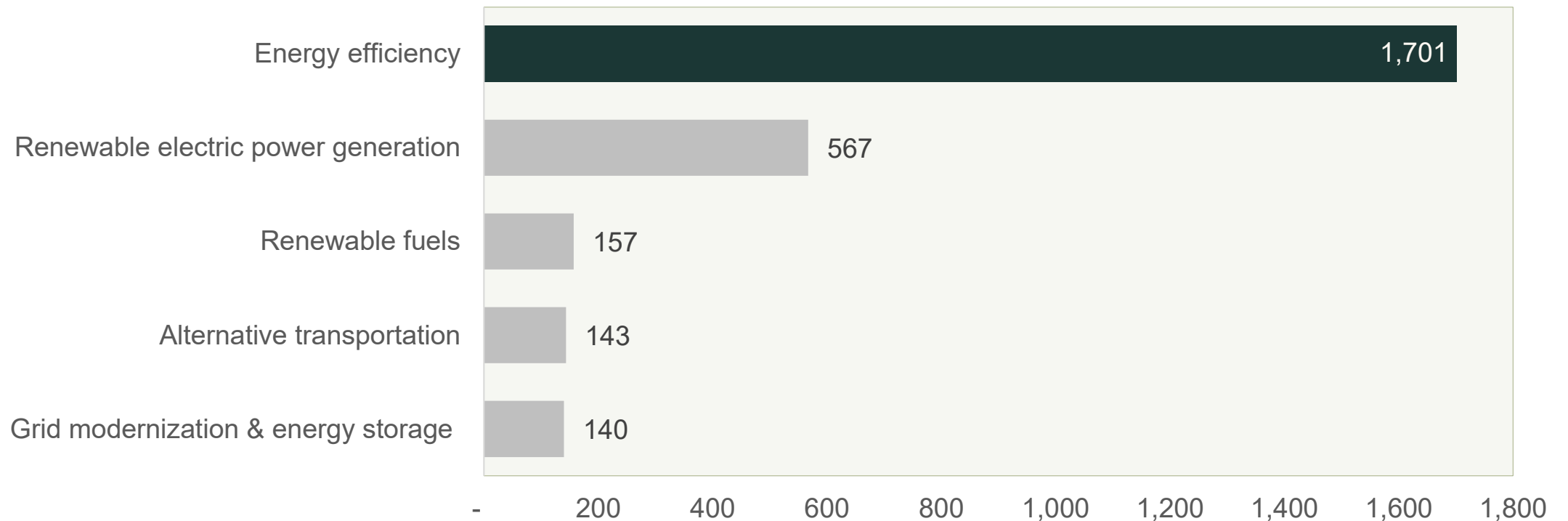


**FIG. 6. MAINE CLEAN ENERGY GROSS PRODUCT IN MILLIONS, BY SECTOR, 2024 (REPORT P. 31)**

*Total GSP for Maine is based on U.S. Bureau of Economic Analysis and JobsEQ data, 2024*

# Over 4 percent of establishments were involved in clean energy in 2024; of these, 63 percent were involved in energy efficiency.

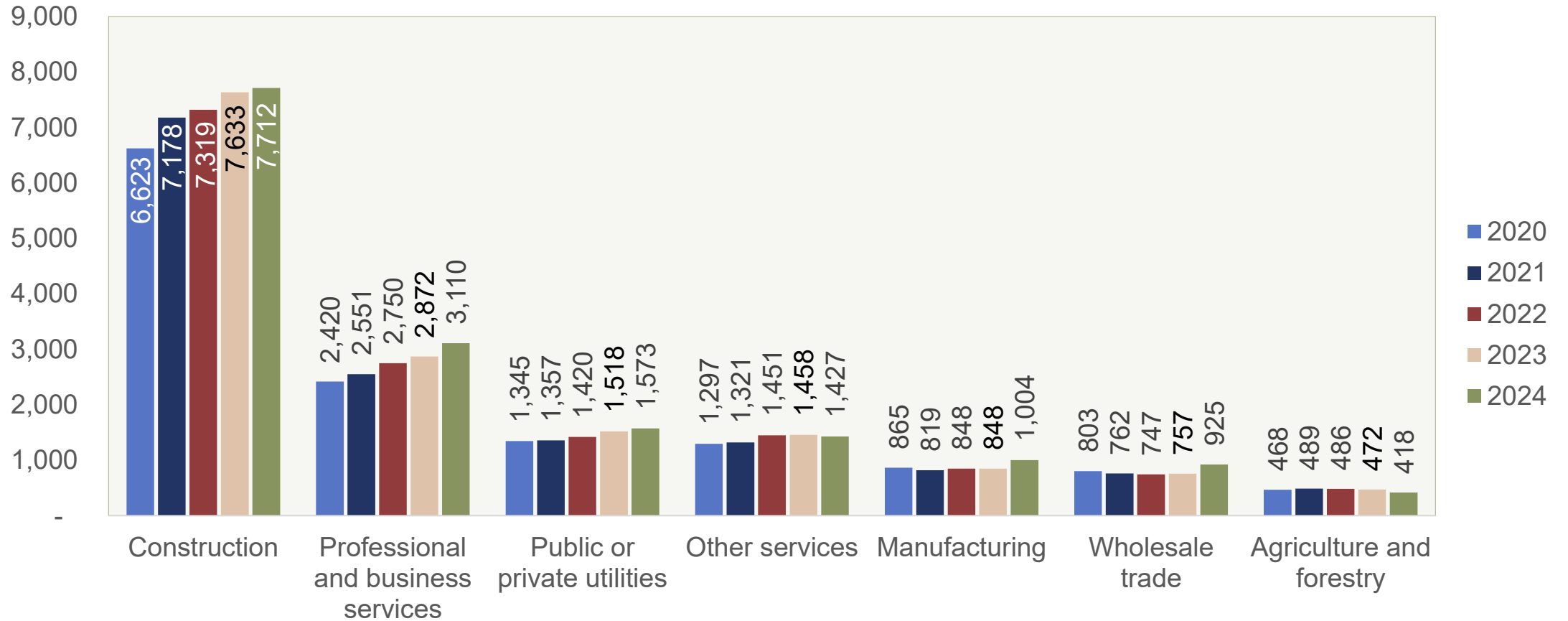
FIG. 7. CLEAN ENERGY ESTABLISHMENTS IN MAINE BY TECHNOLOGY SECTOR, 2024 (REPORT P. 12)



Total establishments in Maine, Q42023, are sourced from: *Quarterly and Annual Industry Employment and Wages*. Center for Workforce Research and Information. Maine Department of Labor.

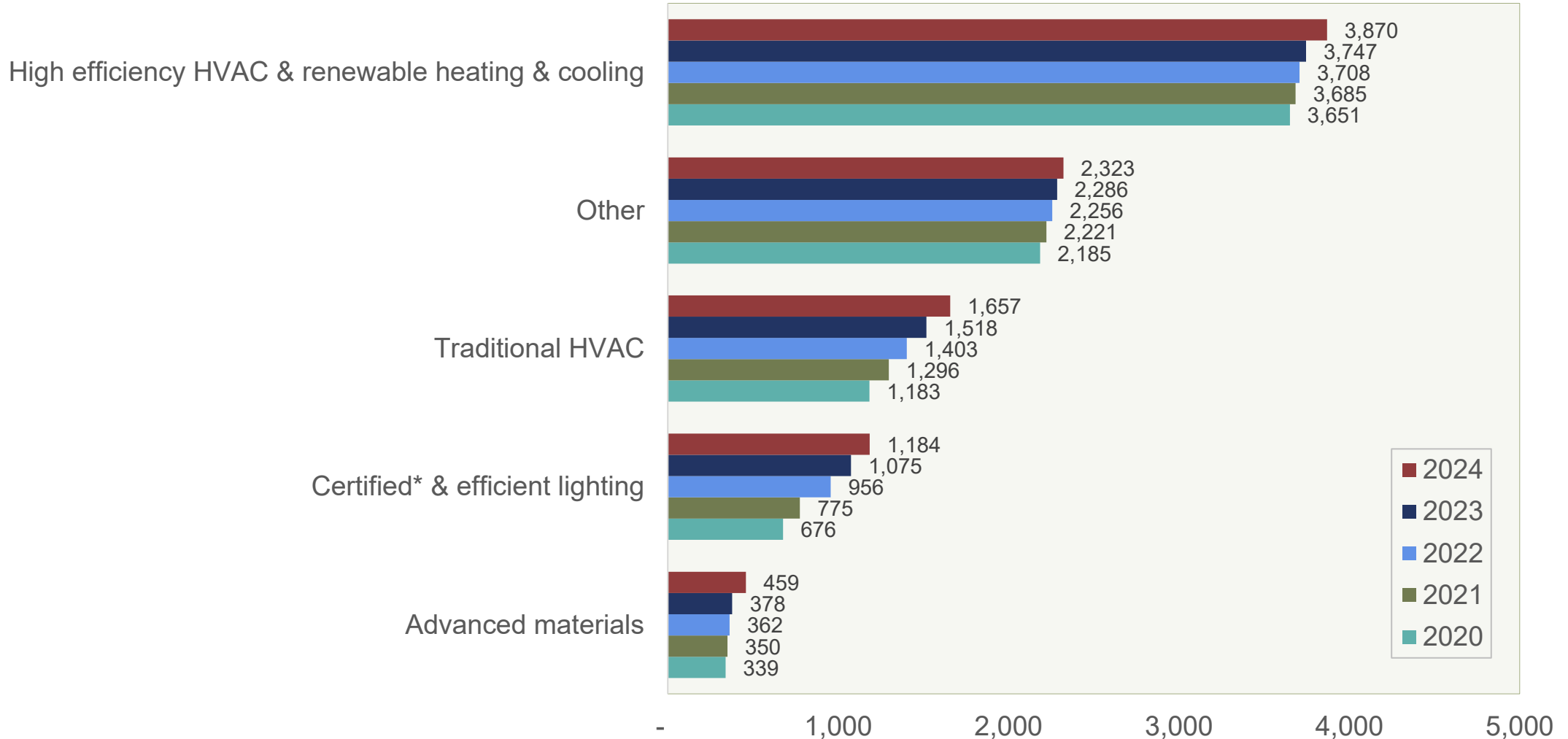
# Construction is the backbone of Maine’s clean energy workforce, accounting for 48 percent of clean energy jobs.

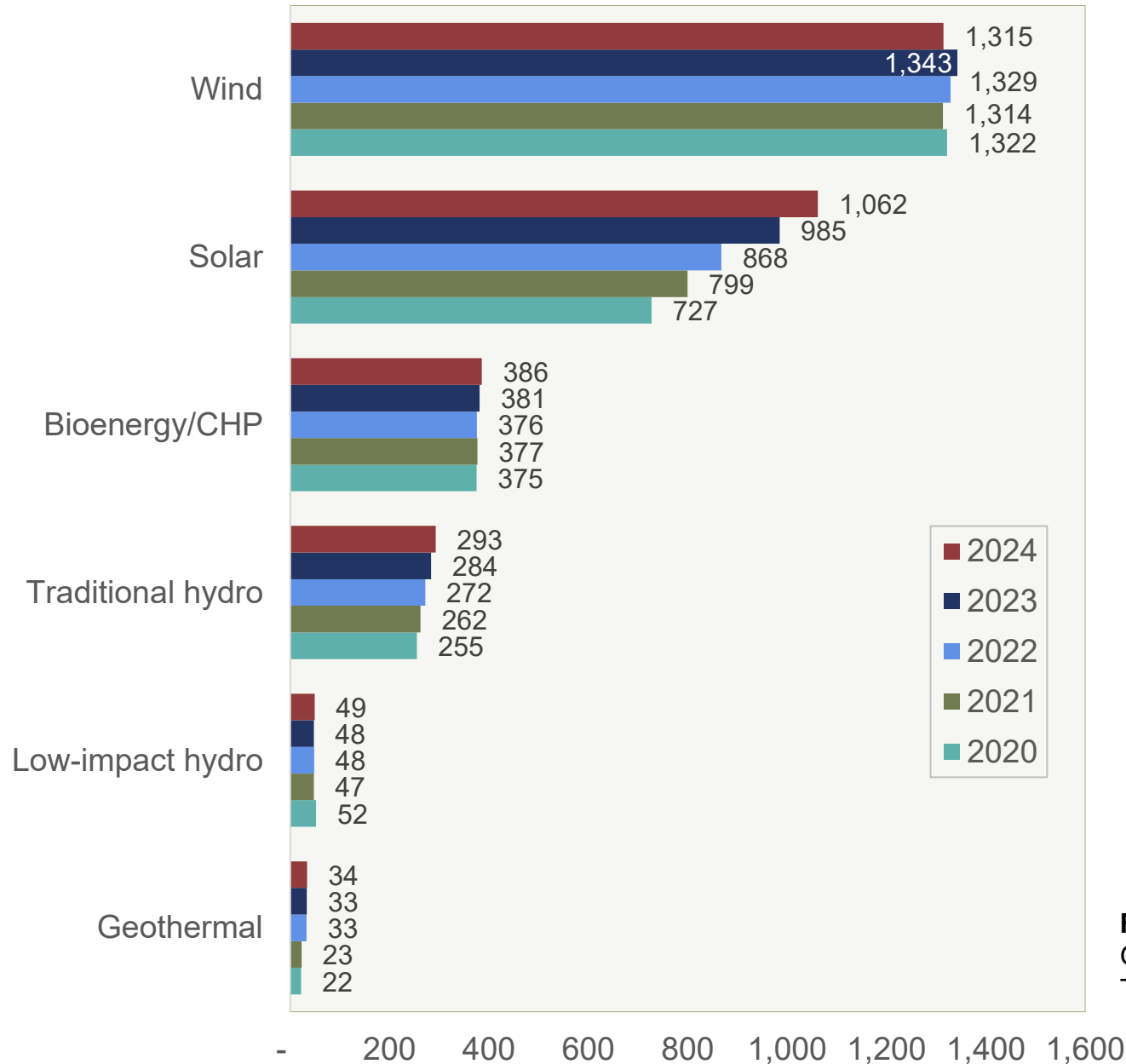
FIG. 8. CLEAN ENERGY EMPLOYMENT IN MAINE BY VALUE CHAIN SEGMENT, 2020-2024 (REPORT P. 16)



# High-efficiency HVAC and renewable heating & cooling account for the largest share of energy efficiency jobs (41 percent).

FIG. 9. ENERGY EFFICIENCY EMPLOYMENT IN MAINE BY SUB-TECHNOLOGY SECTOR, 2020-2024 (REPORT P. 19)

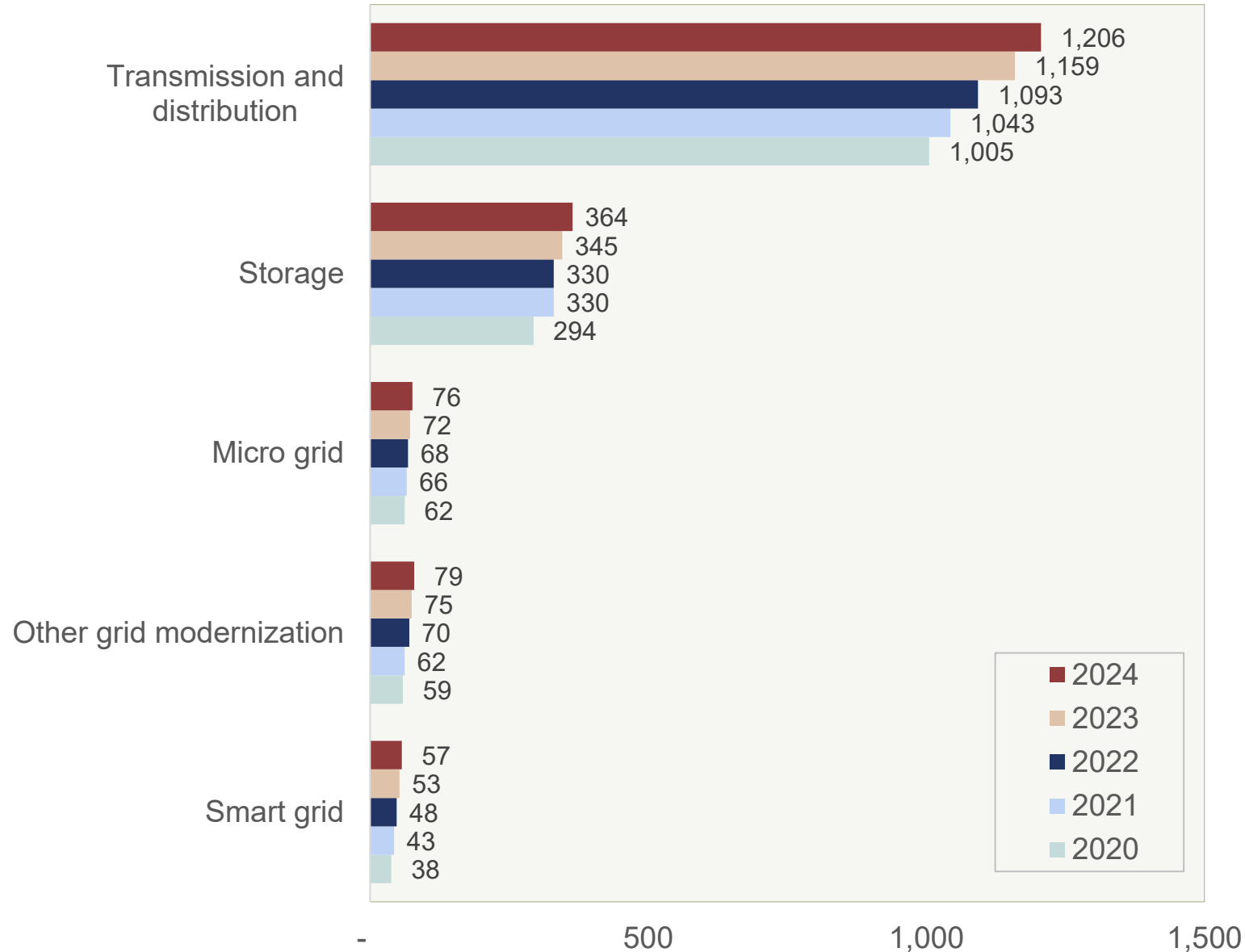




# Renewable Electric Power Generation Employment

- **Wind** power generation jobs accounted for **42 percent** of employment in the sector.
- **Solar** power generation had the **highest growth rate** from 2023 to 2024 (7.8%, or ~75 jobs).

**FIG. 10.** RENEWABLE ELECTRIC POWER GENERATION EMPLOYMENT IN MAINE BY SUB-TECHNOLOGY SECTOR, 2020-2024 (REPORT P. 22)



## Grid Modernization & Energy Storage Employment

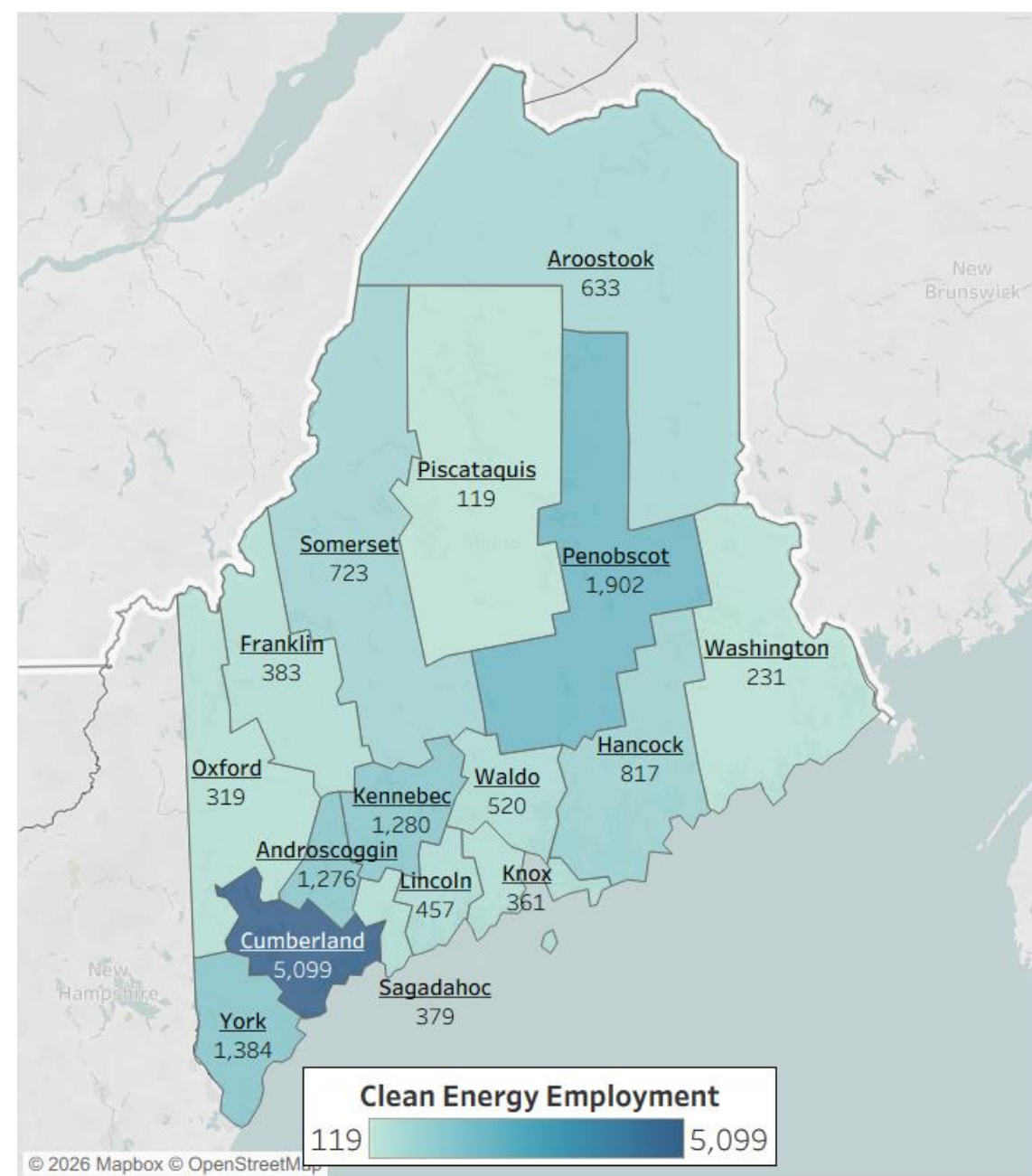
- **Most workers are involved in T&D, which has grown steadily since 2020.**
- For the first time, the number of microgrid jobs is back to pre-pandemic levels.

**FIG. 11.** GRID MODERNIZATION AND ENERGY STORAGE EMPLOYMENT IN MAINE BY SUB-TECHNOLOGY SECTOR, 2020-2024 (REPORT P. 23)

# Regional Clean Energy Employment

- **Cumberland County employed the largest number of clean energy workers, accounting for 32%**
- Clean energy accounted for **4.7% of Waldo County’s workforce** in 2024 – the highest share of any county

FIG. 12. CLEAN ENERGY EMPLOYMENT BY COUNTY, MAINE, 2024 (REPORT P. 27)



# Maine’s clean energy workforce is more racially and ethnically diverse than the state’s overall economy, but lags in gender and age diversity.

**TABLE 1. CLEAN ENERGY WORKFORCE DEMOGRAPHICS, 2024 (REPORT P. 29)**

	Maine Clean Energy Industry	Maine Overall Economy	Maine Construction Industry	Maine Manufacturing Industry
Female	26.6%	51.4%	15.3%	26.2%
Male	73.4%	48.6%	84.7%	73.8%
White	90.2%	92.9%	96.3%	93.2%
Hispanic or Latino	3.9%	2.5%	2.5%	2.3%
Black or African American	3.5%	3.0%	1.3%	2.6%
Asian	2.7%	1.7%	0.5%	2.1%
American Indian or Alaska Native	0.7%	0.6%	0.6%	0.5%
Native Hawaiian or Other Pacific Islander	0.3%	0.1%	0.1%	0.1%
Two or more races	2.6%	1.6%	1.2%	1.5%
Veterans	7.6%	7.3%	Insufficient data	Insufficient data
55 and over	20.6%	27.6%	26.5%	28.7%

# Maine's Clean Energy Industry: Occupational Analysis

# Occupational Analysis Methodology

- Update to the 2022 Maine Clean Energy Workforce Analysis Report
- Examines 7 categories of clean energy-related occupations:
  1. Construction
  2. Installation, Maintenance, & Repair
  3. Production
  4. Professional Services
  5. Sales & Administrative Support
  6. Transportation & Material Moving
  7. Farming, Fishing, & Forestry
- Some occupations whose workers may engage in clean energy activities are fully clean energy (e.g., solar installers), but not all are (e.g., plumbers)
- Assesses total employment; employment change; regional location quotients; wages at 10<sup>th</sup>, 50<sup>th</sup>, and 90<sup>th</sup> percentiles; and median wage change in Maine

## Nearly 152,600 workers are employed across 154 clean energy-related occupations.

**TABLE 2.** CLEAN ENERGY-RELATED OCCUPATION IN MAINE BY OCCUPATIONAL GROUP, 2025Q2 (REPORT PP. 38-46)

Occupation Category	Total Employment 2025Q2	% Change in Employment 2020-2025Q2
Professional Services	61,456	14%
Construction	35,776	9%
Production	17,063	0%
Installation, Maintenance, and Repair	16,992	11%
Sales and Administrative Support	13,854	-4%
Transportation and Material Moving	4,107	3%
Farming, Fishing, and Forestry	3,319	31%

- Farming, Fishing, and Forestry occupations grew the fastest over the past 5 years and are most concentrated in Maine
- Solar PV installers and wind turbine service technicians are among the fastest-growing clean energy-related occupations

## Professional services and construction occupations experienced the largest increases in median wages from 2021 to 2025.

**TABLE 3.** HOURLY WAGES OF CLEAN ENERGY-RELATED OCCUPATION CATEGORIES, MAINE (REPORT PP. 38-46)

Occupation Category	Median Wages 2021	Median Wages 2025	Entry Wages (10th percentile) 2025	Experienced Wages (90th percentile) 2025
Professional Services	\$38	\$49	\$30	\$81
Installation, Maintenance, and Repair	\$25	\$31	\$22	\$41
Construction	\$21	\$29	\$22	\$38
Sales and Administrative Support	\$27	\$29	\$20	\$44
Production	\$22	\$28	\$21	\$37
Transportation and Material Moving	\$25	\$25	\$20	\$32
Farming, Fishing, and Forestry	\$18	\$24	\$20	\$33

# Appendix

# Clean and Traditional Energy Definitions

APPENDIX TABLE 1. MAINE ENERGY TECHNOLOGY SECTORS, CLEAN AND TRADITIONAL ENERGY SUB-TECHNOLOGY SECTORS

Overall Energy Industry	Clean Energy Industry	Traditional Energy Industry
<b>Energy efficiency</b>	Traditional and high efficiency HVAC, renewable heating and cooling, energy-efficient appliances and lighting, advanced building materials and insulation, and other energy-efficient technologies	N/A
<b>Electric power generation</b>	Renewable electric power generation, including solar, wind, geothermal, bioenergy and biomass, low impact and traditional hydropower.	Non-renewable electric power generation, including natural gas, coal, oil, and other non-renewable electric power generation
<b>Grid and storage</b>	Electric power transmission, control and distribution, smart grid, microgrid, pumped hydropower storage, battery energy storage, mechanical energy storage, thermal energy storage	Traditional power transmission, control and distribution, and fuel storage including liquified natural gas, compressed natural gas, crude oil, refined petroleum fuels, coal, biofuels, and nuclear fuel
<b>Fuels</b>	Renewable fuels, including woody biomass, ethanol, and biodiesel	Coal, oil, natural gas, nuclear fuel, and other fuels
<b>Transportation</b>	Plug-in hybrid vehicles, electric vehicles, hybrid-electric vehicles, and hydrogen and fuel cell vehicles	Gasoline and diesel vehicles, natural gas vehicles, and other



Thank you.

# Additional Resources

- Maine Clean Energy Jobs Network – jobs, trainings, and resources, plus DOL career navigator support: [www.maine-clean-energy-jobs.com](http://www.maine-clean-energy-jobs.com)
- Clean energy occupational profile one pagers

## EQUIPMENT OPERATORS AND ENGINEERS

**Renewable Energy Projects:** Clear and grade land for wind turbines, solar panels, battery storage facilities; move large structures (turbine blades, solar panels)

**Environmental Remediation:** Operate power construction equipment, excavation and loading machines to remove pollution/contaminants from water and soil

**Safety Knowledge:** Hazardous waste disposal for environmental remediation, understanding of energy generation technologies, components, and site layouts

**Emerging Technologies:** Use smart equipment with predictive maintenance, operate electric/hybrid/hydrogen fuel cell machinery, interpret equipment data



### TRAINING & LICENSING

No state license required, but high school diploma typically required

**Maine Training Providers:**

- Maine Community College System
- 2 Registered Apprenticeship programs
- Union Training: IUOE Local 4 (covers all of Maine; training centers in Canton, ME and Medway, MA)
- Construction Industry Associations

**Typical Training:** A few months to 1 year, usually working under experienced employees

### CERTIFICATIONS

**Core Certifications**

- OSHA 10 and 30
- Driver's License, CDL-A and CDL-B
- NCCER

**Clean Energy Certifications**

- **HAZWOPER:** Safe hazardous materials handling for environmental remediation (OSHA-operated)
- **PVIP Board Certification:** Decision-making role in solar installation (NABCEP; requires 10 hrs OSHA + 58 hrs advanced training + installations)

# POWERING CLEAN ENERGY JOBS IN MAINE



What can we help you find?

How would you describe it?

**SEARCH**

Login  
Sign Up

DEMAND	
METRIC	MAINE
Total Employment (2022)	2,405
Clean Energy Employment (2022)	265
Annual Openings	194
Projected Growth (2022-2032)	13.2% (CE)
Projected CE Jobs Added	486
WAGES	
10TH PERCENTILE	\$39,000 <small>(vs. \$31,620 all occupations)</small>
MEDIAN	\$51,020 <small>(7% above state average; exceeds living wage for 1 child families)</small>
90TH PERCENTILE	\$68,460

[Learn more at MAINECLEANENERGYJOBS.COM](http://www.maine-clean-energy-jobs.com)

# Help Shape the Next Energy Plan



[maine.gov/energy/plan](https://maine.gov/energy/plan)

- [Request for Information](#) open through **April 27, 2026**
- [Request a meeting](#) or a presentation with DOER staff
- [Sign up for email updates](#) to stay informed about the 2027 Energy Plan
- [Share your feedback](#) using the [online survey](#) →



MAINE DEPARTMENT OF  
Energy Resources



MAINE DEPARTMENT OF  
**Energy Resources**

**Thank You**

[tagwongo.obomsawin@maine.gov](mailto:tagwongo.obomsawin@maine.gov)

[www.maine.gov/energy](http://www.maine.gov/energy)

**Sign up for the  
DOER email  
newsletter**

